

CLAIMS

What is claimed is:

1. An apparatus, comprising a communication medium;
a first processing device, coupled to the communication
5 medium having a naming service; and
a second processing device, coupled to the communication
medium, having a replicated naming service.
2. The apparatus of claim 1, wherein the naming service is
a JNDI-compliant naming service.
- 10 3. The apparatus of claim 1, wherein the replica naming
service is available upon the failure of the first naming service.
4. The apparatus of claim 1, wherein the first naming
service includes a naming tree having a node including a service pool
and wherein the replicated naming service includes a replicated
15 naming tree.
5. The apparatus of claim 4, wherein the service pool
includes a current list of service providers.

6. The apparatus of claim 5, wherein the first processing device includes a service provider in the list of service providers.

7. The apparatus of claim 4, wherein the service pool includes a stub.

5 8. The apparatus of claim 1, wherein the naming service and the replicated naming service are created by a multicast program.

10 9. The apparatus of claim 1, wherein the first processing device includes a first stub having a replica handler and the second processing device includes a second stub having a second replica handler.

10. A distributed processing system, comprising:
a communication medium;
a first computer, coupled to the communication medium, having a naming tree including a remote method invocation (RMI) stub for accessing a service provider;
15 a second computer, coupled to the communication medium, having a replicated naming tree and the service provider.

11. The distributed processing system of claim 10, wherein the first computer includes a first kernel for transferring a message to a second kernel in the second computer.

5 12. The distributed processing system of claim 11, wherein the first kernel includes a remote Java™ machine and the second kernel includes a remote Java™ machine.

13. The distributed processing system of claim 11, wherein the first kernel includes a thread manager software component.

10 14. The distributed processing system of claim 11, wherein the first kernel includes a socket manager software component.

15 15. The distributed processing system of claim 12, wherein the first remote Java™ virtual machine includes a peer-gone detection software component.

16. The distributed processing system of claim 12, wherein the first remote Java™ virtual machine includes a message compression software component.